

REMARKS

Reconsideration of this application and the rejection of claims 1-14 are respectfully requested. Applicant has attempted to address every objection and ground for rejection in the Office Action dated August 8, 2005 (Paper No. 080105) and believes the application is now in condition for allowance. The claims have been amended to more clearly describe the present invention. The Specification has been amended to update the status of related applications and to correct typographical errors. No new matter has been added to the application.

Claims 1-4 and 6-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Webb et al. (U.S. Pat. No. 3,901,634). Webb discloses a compactor for converting a dry, friable cement mix into a concrete panel, including compact roller sets 42, 44 and 46, each of which contains a plurality of wheels 52, with the wheels of adjacent rollers being offset from each other. (col. 2, ll. 58-61; FIG. 3). In Webb, the wheels of adjacent roller sets do not intermesh, since they do not overlap, due to the relative spacing of the shafts (See FIG. 3 of Webb). If the wheels 52 of Webb were gears, they could not mesh because they are not in any sort of overlapping relationship.

In contrast, amended claim 1 of the present invention recites, among other things, "said first shaft being disposed relative to said second shaft so that said disks intermesh with each other, and wherein, when viewed from the side, peripheries of said first and second pluralities of disks overlap each other."

Applicant submits that Webb fails to disclose all of the features recited in amended claim 1. Specifically, Applicant submits that as seen in FIG. 3 of Webb, which shows a top view of the apparatus (col. 1, line 53), the roller sets 42, 44 and 46 include wheels 52 that are offset from each other, but that do not engage or come in contact with each other. In contrast, as shown in FIG. 3 of the present application, when viewed from the side, the peripheries of the disks 32 clearly intermesh or overlap with each other. Accordingly, Applicant respectfully traverses the rejection of claims 1-4 and 6-8 under 35 U.S.C. § 102(b).

Claims 9-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fritsch (U.S. Pat. No. 5,020,916). Fritsch discloses an apparatus for continuously treating liquids, including drive shafts 10 carrying axially spaced disks 13, 14, 15, wherein the disks 13, 14, 15 mesh in a comb-like manner. (FIG. 2). The drive shafts 10 are arranged in a circular orientation in a drum or housing 2, and are arranged for continuous processing such as mixing, homogenizing, gassing and degassing. (FIGs. 6-8 and 10; col. 5, ll. 52-60).

In contrast, amended claim 9 recites, among other things, “peripheries of said first and second pluralities of relatively large diameter disks being in close proximity to corresponding peripheries of said opposed relatively small diameter disks; and said shafts being oriented on the frame to be generally parallel to each other and to define a plane vertically displaced from and parallel to a moving carrier on said frame.”

Applicant submits that Fritsch fails to disclose all of the features recited in amended claim 9. Specifically, in Fritsch, the shafts 1 are arranged in a circular manner defining more than one plane, and do not define a plane vertically displaced from and parallel to the moving carrier, as recited in amended claim 9. Accordingly, Applicant respectfully traverses the rejection of claims 9-13 under 35 U.S.C. § 102(b).

Claim 14 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Fritsch. The arguments stated above traversing Fritsch are reasserted here.

Amended claim 14 now recites, among other things, each of said first plurality of relatively large diameter disks overlapping a corresponding one of said second plurality of relatively large diameter disks approximately the length of a radius of said large diameter disks; peripheries of said first and second pluralities of relatively large diameter disks being in close proximity to corresponding peripheries of said opposed relatively small diameter disks; said shafts being oriented on the frame to be generally parallel to each other and define a plane vertically displaced and parallel to said board production line; said first plurality of relatively large diameter disks being disposed relative to the frame to create a first trough pattern in the slurry for embedding the fibers therein, and said second plurality of relatively large diameter disks being disposed relative to the frame to create a second trough pattern in the slurry, said second trough pattern being transversely offset from said first pattern....”

Applicant submits that Fritsch fails to disclose all of the features recited in amended claim 14. Specifically, as stated above with respect to claim 9, in Fritsch the shafts 1 are arranged in a circular manner defining more than one plane, and do not define a plane vertically displaced from and parallel to the moving carrier on the frame, as recited in amended claim 9. Further, the disks in Fritsch do not knead and form trough patterns in the slurry as recited in amended claim 14 and as shown in FIG. 4 of the present invention. Rather, Fritsch discloses a continuous mixing process that takes place inside of a circular drum, rather than the “kneading” action recited in amended claim 14 by virtue of the incorporated subject matter of claim 7. Finally, as seen in FIG. 2 of Fritsch, the relatively large diameter disks 13 overlap each other, but the overlap is clearly less than a radius of a corresponding one of the relatively large diameter disks, in contrast to amended claim 14. Accordingly, Applicant respectfully traverses the rejection of claim 14 under 35 U.S.C. § 102(b).

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being obvious over a combination of Webb et al. and Fritsch. The arguments stated above traversing Webb and Fritsch are reasserted here.

Applicant submits that neither Webb nor Fritsch, either alone or in combination, suggest or disclose all of the features recited in amended claim 1, from which claim 5 depends. Applicant further submits that there is no incentive or suggestion to modify Webb as suggested by the Examiner.

Specifically, the apparatus in Webb is designed for promoting compaction of a cement mix, hence the spread out pattern of wheels 52, among other things. Fritsch provides a continuous mixer or reactor located in a circular drum, where the constant rotation of the shafts provides mixing or homogenizing function for gassing/degassing, polymerizing of liquids, suspensions, viscous substances etc. in the manner of a blender. The relatively intricate mixing mechanisms of Fritsch are unsuitable for dealing with a settable slurry, the focus of the present embedment device. There would be no incentive to combine Webb, focused on compaction of cement board components, with Fritsch, concentrating on the homogenizer discussed above. Modifying Webb to include the shafts and disks disclosed in Fritsch would not aid in compacting the cement mix disclosed in Webb.

Even if the references were combinable as suggested by the Examiner, the structure recited in amended claims 4 and 1 would be neither disclosed nor suggested. As asserted above, Fritsch fails to disclose or suggest the recited orientation of the shafts, and Webb certainly fails to contemplate intermeshed disks as now recited. Accordingly, Applicant respectfully traverses the rejection of claim 5 under 35 U.S.C. § 103(a) in view of Webb and Fritsch.

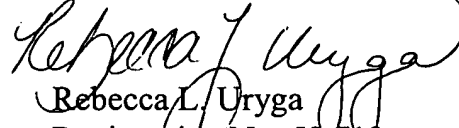
In view of the above amendments, the application is respectfully submitted to be in allowable form. Allowance of the rejected claims is respectfully requested. Should the Examiner discover there are remaining issues which may be

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resolved by a telephone interview, she is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

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